

On page 3, paragraph 1 of the Office Action, the Examiner has objected to claim 10 because of an informality in grammar. In response, Applicants have amended claim 10 in line 2 by deleting the word "forms" and substituting the word "form." Applicants believe this amendment corrects the grammar of claim 10 and thanks the Examiner for pointing out such informality.

On page 3, paragraph 2 of the Office Action, the Examiner has rejected claim 2 under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner states that "it is unclear what is meant by 'discharge concrete from one of the first end and the second end. It appears to be illogical and grammatically inconsistent'".

In response, Applicants respectfully traverse the Examiner's characterization. Applicants submit that claim 2, as originally written, complies with 35 U.S.C. §112, second paragraph and particularly points out and distinctly claims the subject matter which Applicants regard as the invention. Specifically, the claim states that concrete can be discharged from either the first end of the mixing drum or the second end of the mixing drum. As written, claim 2 recites alternatives in a positive manner which is an accepted way of claiming. Accordingly, Applicants respectfully request that the Examiner withdraw his rejection of claim 2 under 35 U.S.C. §112, second paragraph.

On page 3, paragraph 5 of the Office Action, the Examiner has rejected claims 1-23 under 35 U.S.C. §102(b) as being anticipated by Davis (USPN: 4,054,194). Davis discloses a chute for freshly mixed concrete which includes a metal frame having a replaceable polyurethane liner, with the liner secured to the frame with a "fastening means." The Examiner believes that Davis discloses all the limitations of claims 1, 11 and 20 of the present application which are the independent claims.

In response, Applicants submit that independent claim 1 and independent claim 7 of Davis (the only independent claims) require a "fastening means releasably securing said sheet to said frame". (see Col. 4, line 1 and Col. 4, line 42) Since that required limitation is in a means-plus-function format, the structure and its equivalents, as disclosed in the

specification must be used to interpret the claims. The only "fastening means" is a bolt 28 and a nut 30 which hold the sheet 20 to the frame 18. (see Col. 1, lines 65- and Col. 2, lines 1-7) Davis also discloses another embodiment that the liner 50 (see Fig. 5) "is bolted in and this liner 50 should generally be bolted in all around the edges". The bolts are identified as item 53 in Figures 5 and 6. (see Col. 2, lines 60-68 and Col. 3 lines 1-5)

Applicants point out that their disclosure does not require fasteners to maintain the removable liner in the frame of the chute assembly. As described and claimed in the present application, the chute rails 86 are each configured in conjunction with the liner flange 88, to form a liner pocket 89 to receive the liner 94 and removably retain the liner 94 within the chute assembly 80 of the extension chute 45. (see Specification page 9, lines 15-19) Further, the liner 94 of the present application is maintained in the frame assembly by abutting against the hook 99 at the notch 93 which prevents the liner 94 from sliding forward or downstream when the extension chute 45 is at an angle. (see Specification page 10, lines 3-8).

For at least the reasons set forth above, the Applicants' disclosure is not anticipated by Davis. Applicants respectfully request that the Examiner withdraw his rejection of claims 1-23 as being anticipated under 35 U.S.C. §102(b) by Davis.

On page 6, paragraph 7 of the Office Action, the Examiner has rejected claims 1-23 under 35 U.S.C. §103(a) as being unpatentable over Christenson (USPN: 5,184,706). Christenson discloses a discharge chute assembly for use with a concrete mixing truck fabricated from a fiberglass reinforced polyurethane structural frame in a polyurethane liner. Applicants note that in the two independent claims of Christenson, namely claim 1 and claim 23, the wear resistant liner is "laminated" over the surface of the structural frame. The dictionary definition of laminated is "composed of layers bonded together". (the American Heritage College Dictionary, Third Edition 1997) Such defined characteristic is supported in the specification of Christenson in Col. 7, lines 40-65. It is clear that the preferred embodiment as well as the claimed embodiment in Christenson describes the liner 300 as being a permanent coating on the structural frame 200.

Although, Christenson also suggests a replaceable liner 300 it discloses no definitive mechanism for retaining such replaceable liner on the structural frame 200. Christenson suggests at Col. 7 lines 59-65 that a pawl and ratchet combination or a traverse rib and trough combination can be used with the liner 300 and structural frame 200 but no specific structure or method is described. The only figure in Christenson that shows the liner 300 is Figure 10 and it shows the laminated, i.e., bonded, layer 300. Further, as best understood, a traverse rib and trough combination would require the rib and trough to go across, i.e., traverse, the chute.

Applicants submit that the subject matter sought to be patented in the present application is substantially different than the chute disclosed in Christenson. For instance, Christenson does not describe how or where the traverse rib and trough combination would be placed on the chute nor if more than one trough and rib combination would be required to maintain the liner within a chute. In contrast, Applicants describe and claim a mechanism for retaining a liner as being the chute rails 86 are each configured in conjunction with the liner flange 88, to form a liner pocket, 89 to receive the liner 94 and removably retain the liner 94 within the chute assembly 80 of the extension chute 45 (see Specification page 9, lines 15-20) and that the liner 94 is orientated and aligned with each liner pocket 89 and inserted into the liner pocket 89 formed in the chute rail 86. The liner 94 is in the liner pocket until a notch 93 abuts against the hook 99 on each chute rail 86. (see Specification page 10, lines 1-3) Further, the mechanism for retaining the liner, as described and claimed in the present application, does not traverse the chute.

The Christenson disclosure does not teach or suggest how the liner can be maintained within the chute other than the mere mention of a trough and rib combination. Further, Christenson does not disclose how the liner, if removable, can maintain its shape within the chute. The preferred embodiment as described and claimed in Christenson has the liner 300 laminated, i.e., bonded, to the chute which then inherently would maintain its shape. Figures 5 and 10 of Christenson do not show any kind of trough or rail, notch or hook that can be used to retain and hold the liner 300 within the chute and maintain its shape. In contrast, Applicants describe and claim that the resiliency of the removable liner 94 in the bent u-shape biases the inner edges within the chute pockets 89 and assists in retaining the removable liner 94 in the chute assembly 80. There is nothing that suggests or teaches such retention method

in Christenson such that as the subject matter of the present application, taken as a whole would have been obvious at the time the invention was made to one ordinarily skilled in the art. See In re Sang Su Lee, Docket No. 00-1158 (Fed. Cir., Decided Jan. 18, 2002); In re Kotzab, 55 U.S.P.Q.2d 1313 (Fed. Cir. 2000); and C.R. Bard, Inc. v. M3 Systems, Inc., 48 U.S.P.Q.2d 1225 (Fed. Cir. 1998).

Applicants submit that their mechanism for retaining the liner within the chute and maintaining its shape within the chute is substantially different and not obvious in light of that which is disclosed in Christenson. For at least these reasons, Applicants respectfully request that the Examiner withdraw his rejection of claims 1-23 under 35 U.S.C. §103(a) as being unpatentable over Christenson.

Applicants have attempted to amend the claims to overcome the objection pointed out by the Examiner without adding new matter and Applicants have provided comments to the extent necessary to distinguish over the prior art but with the intent of not limiting the scope of the invention protection afforded by the patent laws and these claims any further than absolutely necessary. Accordingly, the terms of these claims should not be interpreted or read any more ordinarily than required to distinguish over the prior art. It is respectfully submitted that each of the outstanding rejections and objection has now been overcome and that each claim is in condition for allowance. Reconsideration under 37 C.F.R. §1.111 and §1.112 is respectfully requested.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

Date 2-15-02

By James A. Wilke

FOLEY & LARDNER
Firststar Center
777 East Wisconsin Avenue
Milwaukee, Wisconsin 53202-5367
Telephone: (414) 297-5776
Facsimile: (414) 297-4900

James A. Wilke
Attorney for Applicant
Registration No. 34,279

APPENDIX A

The following are marked-up versions of the amended specification paragraphs and claims indicated in the Amendment in accordance with 37 C.F.R. § 1.121. Applicants have used the convention underline to indicate added text and [square brackets] to indicate deleted text.

10. (Once Amended) The vehicle of claim 9, wherein the chute rail and the liner flange are composed of the same material and [forms] form a single, integral member.